



City of Seattle
Department of Transportation
December 2005

Street Improvement Permit Process Information Packet

APPLICANT/DEVELOPER INFORMATION

How to Use This Packet

Throughout this text, you'll see icons in this left column, drawing your attention to important points, dates and critical tasks. They are listed below with short explanations.



Contact: This icon indicates that contact information, phone or email, will follow. For a copy of one of the packet sections, call (206) 684-5044.



Document

Reference: This icon tells you when to refer to another document for further information.

Street Improvement Permit Process Information Packets

ABOUT THIS PACKET:

There are three packets that describe the Street Improvement Permit Process. Each packet can function independently or together, but each focuses on a different part of the development and permit process. Brief explanations of each packet are below. See the box at left for contact information.

- The **Applicant/Developer Packet** is one of three informational packets designed to help you understand and to meet the requirements that each applicant/developer must meet in the City of Seattle Department of Transportation Street Improvement permitting process.
- The **Engineer/Designer Packet** explains the steps required of engineers/designers in the City of Seattle Department of Transportation Street Improvement permitting process.
- The **Contractor Packet** explains the steps required of contractors in the City of Seattle Department of Transportation Street Improvement permitting process.

Each document within the packets has its own page numbering system, seen in the footer of the second page in each document.

Applicant/Developer Packet



Contact: For a copy of one of the packet sections, call Seattle Department of Transportation at (206) 684-5044 or visit our website at http://www.seattle.gov/transportation/stu/se_sip.htm.

This Applicant/Developer Packet is one of three informational packets designed to help you understand and meet the requirements of the Seattle Department of Transportation Department's Street Improvement permitting process. The other two packets, the Engineer/Designer Packet and the Contractor Packet, are under separate cover.

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 - Application for Street Improvement Permit
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4. Street Improvement Survey Guidelines
5. Bond Transmittal Sample

Introduction

The Department of Planning and Development (DPD) is responsible for issuing a Master Use Permit (MUP) to establish the future use of a site. DPD also coordinates MUP review and building permit issuance with other City Departments, including Seattle Department of Transportation and Seattle Public Utilities. The documents enclosed are intended to clarify the permitting process requirements of Seattle Department of Transportation.

Seattle Department of Transportation requires a Street Use permit for **all** proposed work within the public right-of-way. There are many types of Street Use permits, from street tree planting to barricade use to installation of signs, vaults, etc. Proposed projects that impact public infrastructure items (e.g., sidewalks, street/pavement, drainage, trees, lighting/poles, etc.) require a Street Use Permit. There are two categories of Street Use Permits related to street improvements:

- 1) **Complex projects**, with impacts requiring engineered drawings (i.e., the changes to the public infrastructure are such that the City will need the location of the items within the right-of-way and the City will retain a record drawing, which requires a Street Improvement Permit process, which includes preparation, review and approval of formal plans.)
- 2) **Small projects** with minimal impact within the public right-of-way, such as projects with minimal curb removal and/or minimal sidewalk repair/replacement (i.e. projects not needing a permanent City record of engineered drawings) can be issued a permit through a simpler process.



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STREET IMPROVEMENT PERMIT PROCESS OVERVIEW:

The six phases of the Street Improvement Permit are:

- 1) Pre-application/application
- 2) Review/corrections
- 3) Permit issuance
- 4) Pre-construction
- 5) Construction/inspection
- 6) Project completion

Figure 1 provides an overview of these phases and the activities, which take place within each of the phases.

LINKS BETWEEN MUP & STREET IMPROVEMENT:

The Street Improvement Permit process is linked to the DPD process through the various phases of a project. Figure 2 depicts the Seattle Department of Transportation Street Improvement Permit process, the DPD MUP and Building Permit processes, and the links between the two processes.

SCOPE SCHEDULE & BUDGET:

Our goal is to ensure the most efficient permitting process possible by providing clear requirements, cross-department coordination, access to well-organized information and a clear timeline for the project, as well as minimizing delays and unforeseen costs. To ensure clear communication about the process, time line and requirements, Figure 3 shows both the Applicant's and City's activities by the process phases.

Figure 4 is a project schedule worksheet that outlines mutual milestone dates between the Applicant and the City. The City is committed to fulfilling specific activities within fixed timeframes, and the Applicant needs to ensure their project calendar and activities include the City activities and milestones, as well as ensure they are providing the required information to the City, in the timeframes to achieve the desired project schedule.

The Applicant will be responsible for two types of costs in Street Improvement Permit projects:

- 1) **Costs of City services.** These include: Pre-Application assistance (optional), Engineering Review, Permit Processing, Pre-Construction and Construction inspection services, as well as project close-out costs.
- 2) **Cost of Construction.** The Applicant is responsible for the construction costs of the required public infrastructure components.

REVIEW PROCEDURES:

The Department of Planning and Development's Master Use Permit (MUP) review procedures include the determination of required street and drainage improvements, pursuant to the City of Seattle's Land Use Code (SMC Chapter 23.53), the Grading and Drainage Code, and other requirements, such as mitigation of environmental impacts.

Generally, a developer must obtain a MUP before a Building Permit can be approved. Issues requiring Seattle Department of Transportation review may include any of the following:

- Traffic and site access
- Street improvements (curbs, sidewalks, street or alley paving)
- Street trees
- Drainage and sewage (public sewers, storm drains, water quality and detention facilities in street areas, etc.)

STREET IMPROVEMENTS:

The City of Seattle Land Use Code requires that streets adjacent and leading to development projects be improved or brought up to minimum conditions specified in the Land Use Code and the City of Seattle Street Improvement Manual.

Street improvement requirements vary with land use zones to reflect the intensity of development, the scale and character of the zone, and to provide a balance between



Document

Reference: City of Seattle's Land Use Code (SMC Chapter 23.53), the Grading and Drainage Code.



Document

Reference: City of Seattle's Land Use Code and the City of Seattle Street Improvement Manual.

the need to accommodate vehicular and pedestrian traffic and the desire to preserve and to enhance existing neighborhood character.

All street improvements are to be constructed to City standards by the developer and accepted by Seattle Department of Transportation prior to the issuance of the final Certificate of Occupancy. In special circumstances, Seattle Department of Transportation may approve the project prior to completion and issue a temporary Certificate of Occupancy.

PERMIT ISSUANCE & PROJECT BONDING

Following the review and approval of the applicant's project plans, the applicant will provide Seattle Department of Transportation with a final mylar (reproducible drawing) and an engineer's quantity take-off (Construction estimate). The engineering take-off is used to determine the amount of the surety bond, which is required before the permit can be issued.

Seattle Department of Transportation will use the engineering estimate to prepare the additional information required for the project to proceed to construction. This information includes identifying costs of the applicant's project including costs incurred by the City to date, estimates of inspection and survey costs for the project, and establishing a Construction Bond amount for project.

The applicant will receive this information and coordinate establishment of the construction bond with the desired construction start of the project. Applicants should allow at least three weeks from their submittal of bond information (and forms) to Seattle Department of Transportation to the Pre-construction meeting date, which should be scheduled three weeks prior to the desired construction start date.

PRE-CONSTRUCTION & CONSTRUCTION

Seattle Department of Transportation has standardized and formalized the Pre-Construction process and the requirements. A Seattle Department of Transportation Senior Inspector will contact the applicant for coordination of the Pre-Construction meeting, the information required, and the required attendees. (See Contractor's Informational Packet for additional information).

PROJECT COMPLETION & CLOSE-OUT

Following Seattle Department of Transportation's acceptance of the project as complete, the Inspector will sign-off on the Street Improvement Permit, designating the permit work as completed. Seattle Department of Transportation will close-out the project, including final record keeping (drawing updates, database entries, final invoicing, etc.). The applicant is required to have the original surety bond in place for the one-year period following Seattle Department of Transportation signing off on the Street Improvement Permit work as complete. Near the end of the one-year bond period, the Seattle Department of Transportation Inspector will revisit the project site and one of two things will happen.



Document
Reference:
Contractor's
Informational Packet

- 1) If the inspector determines the project has remained in acceptable condition, the Applicant will be notified and the project surety bond can be released.

- 2) If the inspector determines that the project has not remained in acceptable condition and requires some corrective work, the Applicant will be notified of the corrective action(s) required. Following the completion of corrective action(s) requested by the Inspector (and depending on the severity and nature of the corrections required), the surety bond may then be released.

Figure 1

Seattle Transportation Street Improvement Permit Process Overview

Pre-Application/ Application

Right-of-Way
requirements
identified;
Seattle
Transportation
Permit Application
screened/
accepted **1**

- Pre-Application Services available
- Permit Account established
Project: Scope Schedule and Budget established
- Review Meetings conducted as necessary/
requested
- Q/A for 100% submittals (site visit and intake meeting)
- Estimated Cost of Street Improvements defined
- Estimated Costs of City services and Mutual Calendar Milestones established
- Deposit/invoicing

Review/ Corrections

Seattle
Transportation
Engineering Group
and others conduct
review **2**

- Distribution to required design disciplines
- Compiled set of comments provided
- Intake meeting for response/review
- Project/Permit can be shelved to be coordinated with start of street construction
- Review/update Mutual Milestone Calendar

Permit & Bond Preparation & Issuance

Street Improvement
Permit issued **3**

- Bonding Submittal process

Pre-Construction

Pre-Construction
Meeting **4**

- Pre-Construction requirements
- Mandatory attendees
- Material sources information
- Notifications
- Traffic control
- Construction inspection requirements, etc.
- Review/Update Mutual Milestone Calendar

Construction/ Inspection

Construction and
Final Inspection **5**

- Inspection requirements, process
- Specialty and final inspection requirements
- Review/Update Mutual Milestone Calendar

Completion

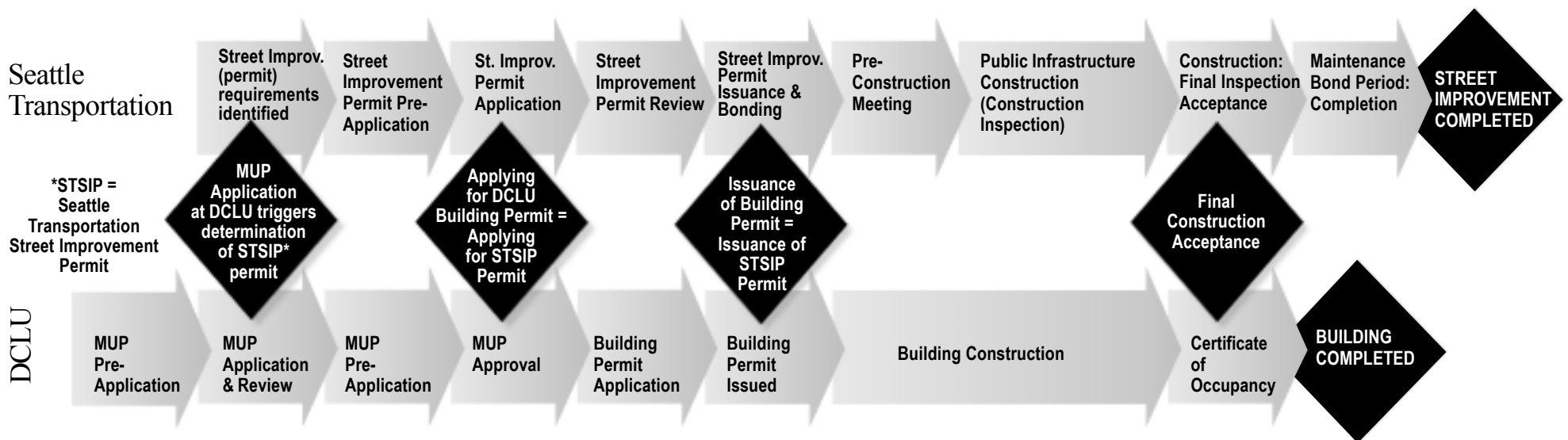
Maintenance Bond
Period **6**

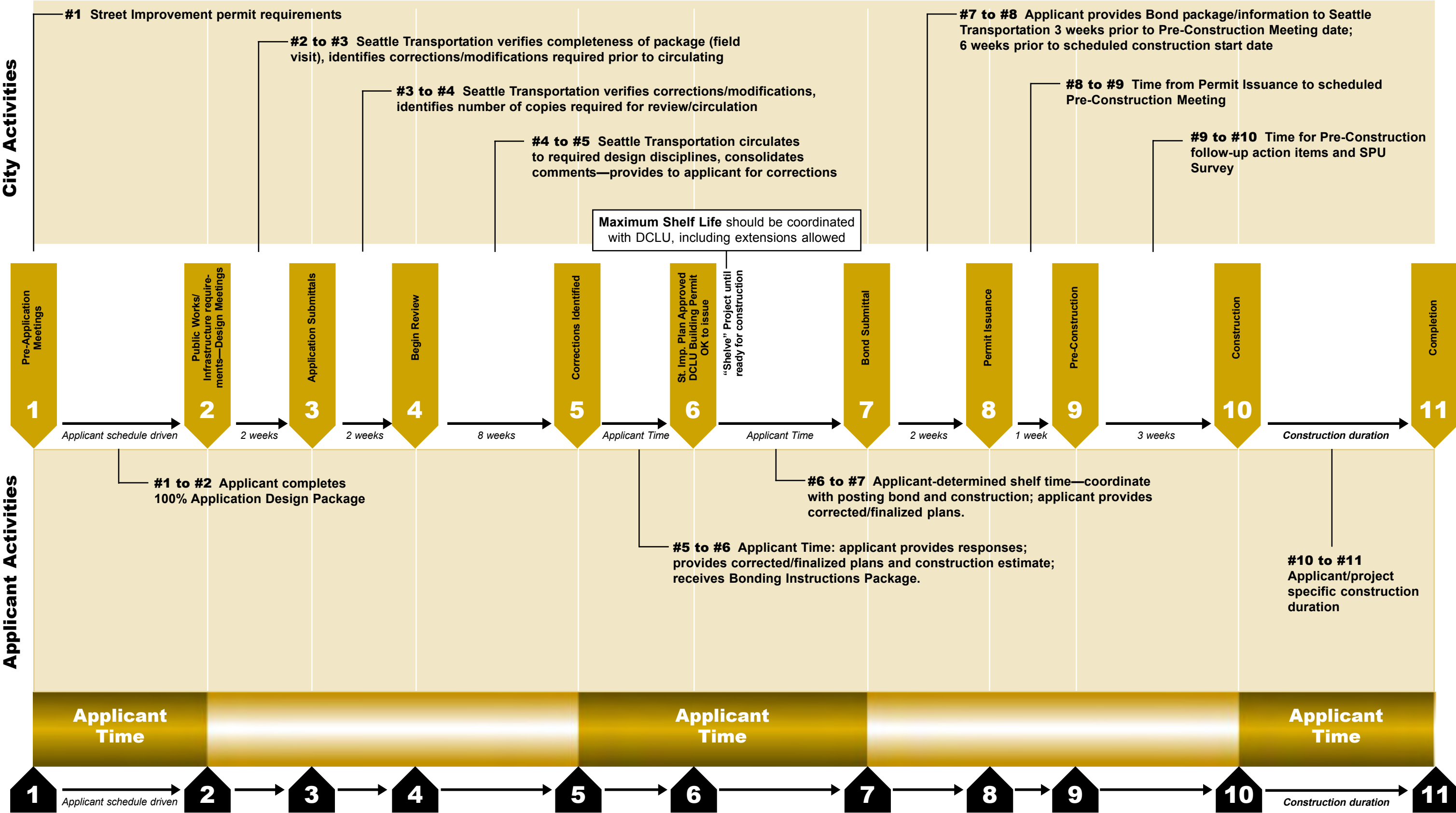
- As-builts
- Field corrections made, if necessary
- Bond release

Figure 2

Seattle Transportation Street Improvement Permit Process

Seattle Transportation and DCLU/MUP Building Permit Process Linkages







Contact: If you have any questions or need assistance, please call (206) 684-5044.



Document

Reference: See Figure 4: Project Schedule Worksheet.

Project Calendar Worksheet

INSTRUCTIONS:

The intent of this worksheet (Figure 4) is for an Applicant and Seattle Department of Transportation Street Improvement Analyst to be able to determine the project's critical path and milestones by examining the project schedule. The City has two required time blocks:

- 1) A 12-week time period required for the City activities, spanning from the receipt of a complete application package to providing the Applicant a set of review comments. The three increments of this period are:
 - a. Two weeks to conduct a site visit and provide an application package quality control, prior to preparing a broader/comprehensive review/circulation
 - b. Two weeks for preparing and distributing to required reviewers
 - c. Eight weeks for reviewers to conduct their review and Seattle Department of Transportation to provide the Applicant with a complete set of comments, corrections, etc.
- 2) A six-week time period required for the City activities, from an Applicant's request to issue a Permit on an approved Street Improvement Permit package and Bond preparation/issuance to the beginning construction. The three increments of this period are:
 - d. Two weeks to process/establish a Construction Bond on an approved Street Improvement package
 - e. One week to schedule a pre-construction meeting
 - f. Three weeks to coordinate survey requirements, prior to beginning construction

The worksheet can be used to either work backward from a "desired" construction completion date, or forward from the Seattle Department of Transportation Street Improvement Permit requirements determination. In either case, the two City required time blocks can be "overlaid" onto the Applicant activity time frames. A narrative, including identifying the "box" numbers from the worksheet (Figure 4), follows.

Working backward from a "desired" completion date (Box 11)

- Subtract the construction duration will provide you with:

Construction start date (Box 10)

- Subtract the City (6 week) time period for Bond and Permit issuance, Pre-Construction meeting and Survey time, provides you with:

(Applicant) Bond submittal/request date (Box 7)

- Subtract the time the Applicant (or more likely the Engineer/Designer) will be allocated for making all City identified corrections/modifications, provides you with:

Applicant Receipt of City Corrections (Box 5)

- Subtract the City (12 week) time period for application quality assurance, preparation/distribution of review packages, designated reviewers review and consolidation of review/comments for Applicant, provides you with:

Permit Application is 100% ready for submittal to Seattle Department of Transportation (Box 2)

- Subtract the time required for an Applicant to include Permit requirements into a 100% complete application package, provides you with:

Applicant receives/understands all Permit requirements (Box 1)



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Additionally, the Project Schedule Worksheet's five columns represent five "phases" of the application/project progressing through the permitting process from Pre-Application through Start of Construction. These columns allow both the Applicant and the Street Improvement Analyst to communicate clearly throughout the permitting process. As the application progresses, both the Applicant and the Street Improvement Analyst will understand what the implications and impacts are for accelerating or delaying any of the designated milestones.

This worksheet is intended to assist the Applicant in identifying the turn-around time (duration) of items within their control and still providing the City the two required time blocks to accomplish the City's responsibilities/activities.

Project Schedule Worksheet

STREET IMPROVEMENT PERMIT PROCESS ACTIVITIES	UPDATED APPLICANT PROJECT TIMELINE				
Milestones and Process Activities	Projected Date at Pre-Application	Projected Date at Application	Projected Date at Receipt of Corrections	Projected Date at Bond Submittal	Projected Date at Construction Start
Desired completion date _____ 11					
Desired Completion Date 11 — WEEKS = 10 <div></div>					
S.I. Construction Start Date 10 — 6 WEEKS = 7 <div></div>					
Bond Submittal Date 7 — WEEKS = 5 <div></div> <p>*Okay to issue Building Permit at Street Improvement Permit Plan Approval</p>					
Corrections 5 — 12 WEEKS = 2 <div></div>					
Applicant Submits Project 2 — WEEKS = 1 <div></div>					
Pre-Application Meeting—Permit Requirement Identified <div>1</div>					

Seattle Permits

— part of a multi-departmental City of Seattle series on getting a permit

Plan Requirements for Construction in the Public Right of Way

Seattle Department of Transportation reviews and approves proposed construction work related to the public right of way. When this work is performed under a private contract rather than a contract with the City of Seattle, the project plans must meet the standards and requirements in this publication.

Drafting Standards

1. **Plan sets for submittal** – Initial plan submittal may be done on 22"x36" sheets of paper (black ink print), Vellum, Mylar or Sepia, plus one additional paper copy. Final plans for permit issuance shall be on 22"x36" Mylar sheets. Use City of Seattle Department of Transportation title and border. An AutoCAD title block is available on our web site at <http://www.seattle.gov/util/Engineering/CAD Resources/SPU & SDOT Title & Border>
2. **Engineer's Seal** - Place the Professional Engineer's seal and original signature in the blocked area on the lower left portion of the sheet; include, the engineer's name, address and phone number.
3. **Title Block** - Use the following format for the title block in the lower right portion of the sheet: "MAIN STREET, et al" (first line), "STORM DRAIN, etc." (second line). The third line is used to identify street names when multiple streets are involved or for the subject shown on a particular sheet. This means the project is principally located on Main Street and primarily consists of storm drain improvements. See attached sample.
4. **Ink and Screening** - Draw in ink on Mylar, plot or print directly on Mylar or use permanent photo Mylar (no "sticky-back" or pasted pieces). Screen the base map which shows existing improvements.

5. **Survey Datum** - Use NAVD88 shown as vertical datum with Benchmarks and NAD83(1991) shown as horizontal datum.

6. **Dimensions** - For all existing and proposed improvements, locate and show dimensions to City of Seattle survey monuments, monument lines, or street centerlines. Dimensioning must be done by stationing and offsetting from these control lines.

7. **Scale** - For scales, use Horizontal 1" = 20', Vertical 1" = 10'. For business districts, SDOT Street Use Section requires Horizontal 1" = 10'.

8. **Compass Orientation** - Draw the plan so the north arrow points to the left or to the top of the sheet.

9. **Vicinity Map** - Include a vicinity map on the cover of or first sheet of the plans with a scale no less than 1" = 200'. Include right of way around the perimeter of the project plus a half block beyond the area of work. Shade the vicinity map area of scope of work and use as an index of the sheets.

10. **Lettering** - Use of a lettering guide is preferred but very neat, legible, free hand lettering is acceptable. The minimum letter size is 1/8 inch. This will ensure the plan is still legible after microfilming or reduction to half size.

11. **Symbols** – Use the standard symbols given in Standard Plans 002 and 003, Standard Plans for Municipal Public Works construction, current edition (Available from the Seattle Public Utilities, Record Vault, Seattle Municipal Tower Suite 4700 or download: <http://www.seattle.gov/util/Engineering/CAD Resources/2000-002 CAD Support Files/index.asp>)

www.seattle.gov/transportation



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Seattle Department of Transportation
Gregory J. Nickels, Mayor Grace Crunican, Director

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Seattle, WA 98124-4996
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- C. Street Improvement cost is established:** The estimated cost for SDOT's services to process the Street Improvement permit will be prepared by SDOT. This deposit is to be made payable to the "City of Seattle." A preliminary engineering cost estimate, prepared by the development design team, is required during design development. Both of these estimates will allow the development team to budget the on-site and the off-site project costs.
- D. Pre-Application services are available:** To understand the street improvement requirements and to coordinate the engineering design, review meetings with key City staff will be conducted as necessary or as requested.
- E. Design Criteria:** The references used in the design of Seattle Street Improvements are:
- Seattle Street Improvement Manual
 - Seattle Standard Plans and Specifications
 - SPU Design Guidelines for Public Storm Drain Facilities
- F. Quality Assurance for completed submittals:** A Street Improvement Analyst and Inspector will visit the site for a "constructability" check. Afterwards, a plan intake meeting will be set to ensure the engineering plans have adequately included all required street improvement elements and City standards. If the intake meeting is successful, the plan may be submitted for plan checking.
- G. Easements or Dedication of Land:** If your project requires easements or dedication of land for streets, utilities, or a similar public use, consult Client Assistance Memo #2203, Dedication of Right of Way or Easements. If access to adjacent properties is needed to complete construction of your project, a temporary easement or right of entry is required.
- H. Public Notification:** Notification to adjacent property owners of pending street improvements is required prior to approval of the street improvement plan.
- I. Application Submittal:** A complete application will include:
- 1) Complete and coordinated plans
 - 2) Project Schedule Worksheet
 - 3) Updated engineering cost estimate
 - 4) Deposit for City services

II. Review & Corrections

- A. Plan Review:** Submit a reproducible or sepia of the plans prepared by a professional civil engineer for review. The plans must be prepared according to the City's drafting standards (Publication #462, Plan Requirements for Construction in Public Right of way). A 40 working day review cycle will be incorporated into the Project Schedule Worksheet.
- B. Coordinated City Review:** Design plans are distributed to approximately 20 review locations, with design engineers and utility companies among the reviewers. Street Use will lead the review of the improvements in the public right of way.
- C. Consolidated set of review comments:** A consolidated set of electronic review comments, complete with markup and attachments, will be prepared for response by the development design team. An adequate written response and plan correction must accompany each review comment prior to Street Use accepting the plans for a final check.
- D. Intake meeting to review designer responses:** To better understand the required plan corrections, a meeting may be set to discuss or resolve the review comments.
- E. Submit Final Plans:** After corrections and revisions are approved by the Street Improvement Analyst, submit final plans for the City's permanent records. The final plans must be based on SDOT mylar sheets, be original drawings or reverse print fixed line photo-mylar plans, and have the professional civil engineer's original seal and the engineer's original signature in permanent ink.

III. Permit & Bond Preparation & Issuance

- A. Bond submittal:** A surety bond or cash deposit is required prior to issuance of the Street Improvement Permit. The value of the bond is based on the street improvement construction cost and the expense the City may occur as a result of unfinished work or the potential damage to utilities. Your Street Improvement Analyst will provide a bond to be completed by you and your bonding company. Governmental agencies are exempt from the surety bond requirement.

B. Provide Liability Insurance: The permittee shall provide a Certificate of Liability Insurance covering the activities relating to the permitted work. See SDOT Client Assistant Memo #2102, Certificate of Liability Insurance.

C. Issuance of Street Improvement Permit: A Street Improvement Permit is issued to construct the approved plan when the property owner or permittee signs for the permit.

D. Other Permits: SDOT may require other Street Use permits in addition to the Street Improvement Permit, depending on the nature of the project. For example, if an area of a City street or sidewalk outside the construction area will be needed to store equipment or materials this would be covered under a separate permit.

IV. Pre-Construction

A. Pre-construction meeting: The permittee shall request a pre-construction meeting with the Street Use Inspector at least three weeks before construction will begin. A representative of the owner as well as the contractors and subcontractors must be present at the pre-construction meeting. The design engineer should also be invited to the meeting. The contractor should bring a work schedule of the improvement and any traffic control plans to the meeting.

B. Survey for construction: The Street Use Inspector will arrange for a location survey of the improvements at the site by City of Seattle surveyors following the pre-construction meeting.

V. Construction & Inspection

A. Construction of improvement: Your project manager or superintendent coordinates the construction activity and works with the Street Use Inspector to complete the work on schedule.

B. Construction completed: When the construction is completed, your project manager makes a request for final inspection. The Street Use Inspector will schedule the final inspection by other City sections and compile a punch list (a list of items that need correcting). These other City sections may include: street maintenance, drainage and waste water video taping of the new main and checking structures, traffic control, and street tree inspection.

C. Completing the punch list items: When all items from the punch list are completed, a final check is made. The permit is signed off and the inspector's book is turned in for processing of the as-built records.

VI. Completion

A. Street Use Permit sign-off: After acceptable completion of the construction deficiencies, the Street Use Permit is signed-off and the construction one-year warranty period commences. If applicable, DPD's building inspector is notified of the completed right of way improvements. This is a necessary step in DPD's issuance of the development's Certificate of Occupancy.

B. As-built Processing: After City acceptance of right of way improvements, the Street Use Inspector's construction notes and measurements are turned in for the as-built markups on the mylar records.

C. Warranty Period: According to Seattle Municipal Code, the entire surety bond or cash deposit must stay in force for a period of one year after construction acceptance of the public right of way improvements by SDOT. Eleven months after permit sign-off, the inspector returns to the site to verify that the improvements have remained in the original accepted condition. If problems exist, the inspector will notify the owner of the required corrections. After any necessary corrections made and after expiration of the one-year warranty period, a letter will be sent to the permit applicant notifying them of the bond release.

Seattle Permits

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www.seattle.gov/transportation



City of Seattle
Seattle Department of Transportation

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CADD Standards Guidelines

1. The current edition of the "Seattle Standard Specifications" and "City of Seattle Standard plans shall be adhered to.
2. The drawings shall be submitted as AUTOCAD release 14 (or later) .dwg files. All electronic files will be submitted for review.
3. The .dwg files should be created to plot a 22"x34" hard copy plan sheet.
4. Where the contract drawings indicate existing infrastructure or proposed improvements within the City's Right of Way, The current SDOT Layering methodology shall be adhered to.
5. Features on the drawings shall be shown and noted in accordance with standard abbreviations and symbols (Standard Plan No 002 and 003) and be created in accordance with the SPU/ Seattle Department of Transportation drafting standards.
6. All existing utilities, improvements and topography determined necessary in the project scope, shall be illustrated in the drawing.
7. Plans shall be prepared with such precision and in such detail as to permit the convenient layout in the field for construction and other purposes within a degree of accuracy acceptable to Seattle Department of Transportation.

Information Required

1. **Grades** – If the road or alley adjacent to your property is not improved, research any existing grade and topography data from Seattle Public Utilities at Engineering Records Vault, Seattle Municipal Tower 47th Floor, 700 Fifth Avenue, (206) 684-5132. If data is not available, the applicant shall conduct a topography survey of their project site as per attached drawing SURV-0001 for streets and SURV-0002 for alleys. If the street or alley adjacent to the proposed project is already improved to full street standards (concrete curbs, sidewalks, paving), the building grade shall be calculated by visiting the following website and using the web based tool <http://www.seattle.gov/transportation/gradesheetintro.htm> . The grades shown on the plan must agree with the building/ alley grade calculated using the web based tool, or be approved by the Seattle Department of Transportation.

All profiles and cross sections must show the proposed grade as well as the existing grade.

Show in the profile: centerline, top of curb, back of walk, access points along property, floor slab elevations, underground water mains, etc.

2. Existing Improvements and Topography -

Existing Improvements and Topography -Show all existing underground and surface improvements and topography in proximity to the proposed project. This information must be shown for the full width of the adjacent right of way, and at least 50 feet from the boundaries of the proposed project, to show possible impacts on neighboring properties.

Obtain information for existing surface and underground improvements at the Seattle Public Utilities Engineering Records Vault, Seattle Municipal Tower 47th Floor, 700 Fifth Avenue, (206) 684-5132. The "Vault" has information on public sewers, public storm drains, curbs, sidewalks, grading. For information on sanitary side sewers and service drains, see the Seattle Department of Transportation Street Use Counter, Key Tower Suite 3700, 700 Fifth Avenue, or call (206) 684-5283. Obtain City Light, telephone, cable TV, steam, natural gas, and other private and public utilities information at the same location. Also, the Seattle Department of Transportation's Traffic Counter, also located on the 37th floor of Seattle Municipal Tower, has traffic signal information.

3. **Sewer, Water, and Drainage** - Provide profiles of all proposed sewer, water, and drain lines. Show existing underground improvements where they cross or connect to the new improvements.

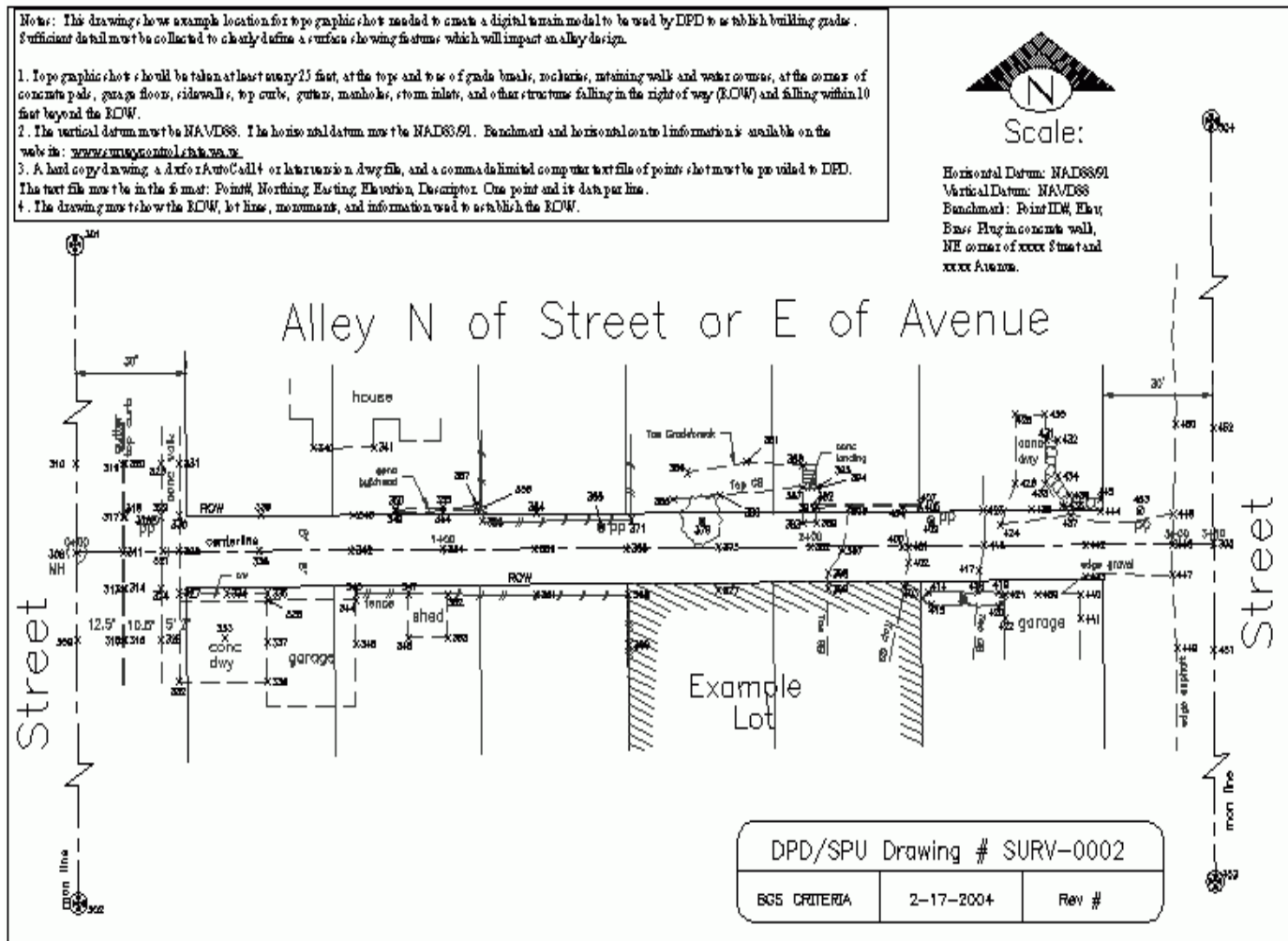
Show the storm water drainage discharge point to a public system or natural water course. Provide drainage system details whether or not detention of storm water is required.

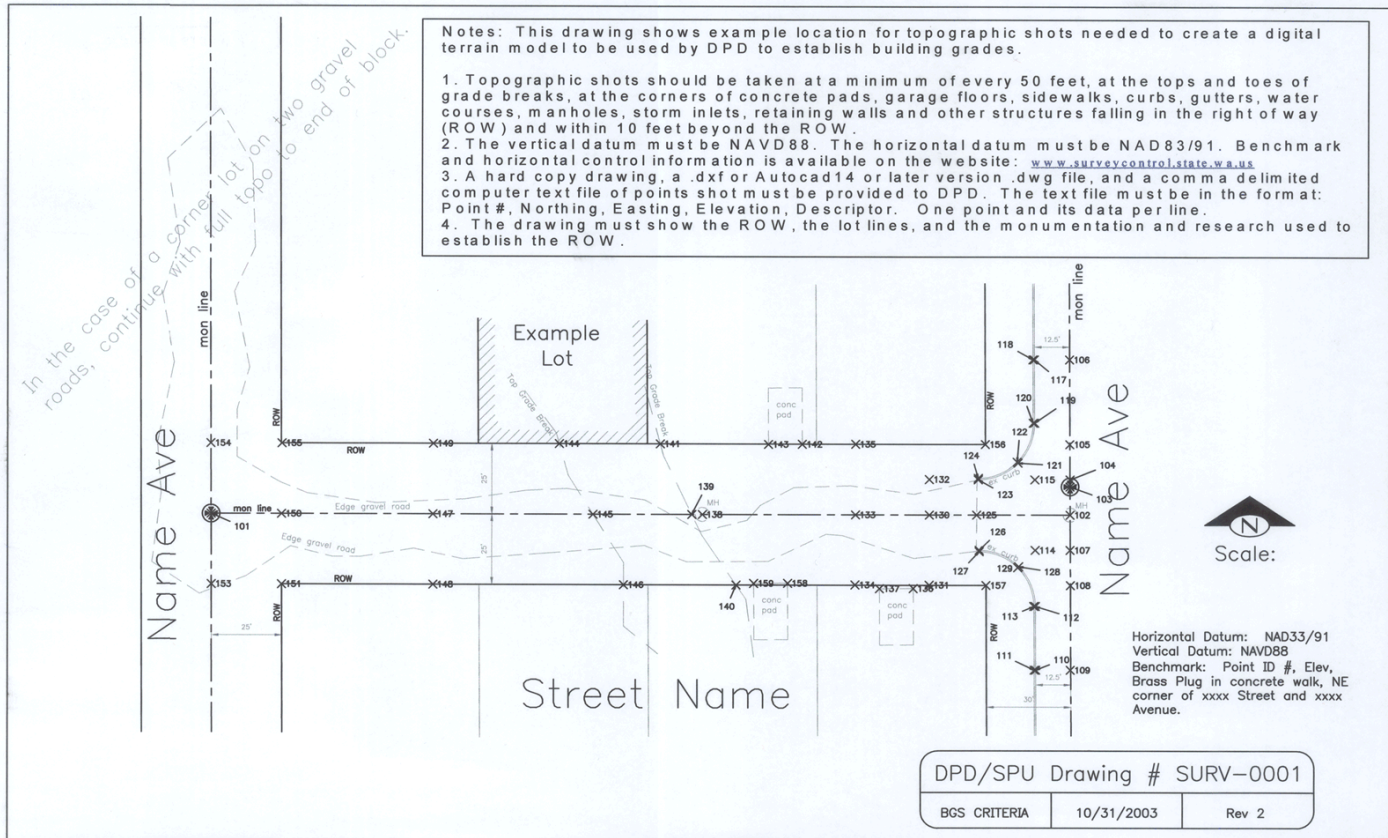
Contact the Water Department to learn its requirements, 684-5976.

4. **Photos (Optional)** - Submit photographs of the project site if these will help the Seattle Department of Transportation review process.

For More Information: Contact SDOT “on-call” plan analyst at the DPD Permit Center
Seattle Municipal Tower Suite 2000, 700 5th Avenue, or call 684-3679 for details about:

- building grade sheets,
- street design,
- sanitary sewer design,
- street trees and landscaping, and
- drainage design.





Drafting & Standards Checklist for Street Improvement Plan Submittal

- ☐ Mylar, Sepia or Vellum Sheets 22" x 36" and two prints
- ☐ City of Seattle, Seattle Transportation, **Private Contract Mylar** sheet.
- ☐ Title Block (refer to example at the end of this document)
 - ☐ Left box - Engineer's seal with signature
 - ☐ Left box - Engineers name
 - ☐ Left box - Engineers address
 - ☐ Left box - Engineers phone number
 - ☐ Right box - Plan Title: primary street name- 3/8" text (first line) FOURTH AVENUE NW, et al
 - ☐ Right box - Plan Title: contents of plan- 1/4" text (second line) CC, CW, PSD, WM, PAVING, etc.
 - ☐ Right box - Plan Title: optional - 1/4" text (third line). (Name of street or subject shown on specific sheet)
 - ☐ Above Right box - 1/8" text project address, project name optional, and DPD project number
- ☐ Screen the base map that shows existing improvements — readable
- ☐ Survey Datum (NAVD 88 and NAD83 (1991))
 - ☐ Show and describe Survey Monuments
 - ☐ Monument lines with bearing and distance or radius and delta angle
 - ☐ Street Centerlines, right-of-way width and lines
 - ☐ Station Monuments
 - ☐ Dimension by stationing and offsetting from monument lines
 - ☐ Station all PC (Point of Curvature)
 - ☐ Station all PT (Point of Tangency)
 - ☐ Station Matchlines
- ☐ Scale Horizontal 1" = 20' (Business Districts 1" = 10')
- ☐ Scale Vertical 1" = 10'
- ☐ Compass Orientation - North Arrow to the left or top of sheet
- ☐ Vicinity Map on cover sheet 1" = 200' (to show reduced version of project perimeter)
 - ☐ Shade vicinity map for scope of work (work in ROW or Easements, not private property)
 - ☐ Indicate sheet numbers on vicinity map (see sample on back)
- ☐ Lettering minimum size 1/8 inch
- ☐ Lettering guide (legible, neat)
- ☐ **Standard symbols from Standard Plan 002 and 003**
- ☐ **Standard shading from Standard Plan 002 and 003**
- ☐ Typical Cross Section of Improvements
- ☐ Cross Sections (these may be on separate 8.5 x 11 sheets stationed)
- ☐ Profile existing grade
- ☐ Profile proposed grade (grade point is face of curb)
 - ☐ Stations at grade breaks and at beginning and end of vertical curves
 - ☐ Stations and elevation at VPI
 - ☐ Length of vertical curve
 - ☐ Station and elevation at high/low point, if any, of vertical curve
- ☐ Slope line on plan view
- ☐ Catch line on plan view
- ☐ Profile existing utilities (water main, PSS, PS, PSD)
- ☐ Profile new utilities

3000 NE 130TH STREET

DPD PROJECT # 6070000

NE 130TH STREET

CURB, CW, LANDSCAPE, PAVING, ETC.

PLAN AND PROFILE

Above is a *sample* Title for **Street Improvement Permitting Plans**. The font (type and size) shown in the above sample is listed below, any similar font or lettering template is acceptable.

1. The first line is Universal font (size 36, ~ 3/8" high) centered and is the primary street name where the majority of the improvements are located. This is often the frontage street for the project. If the plans include more than one street or alley; then add "ET AL" after the street name. An example is N 130TH STREET ET AL could represent work on N 130th STREET from Greenwood Ave N to 1st Ave NW. A partial improvement along the 900 block of N 130th, would be titled NORTH 130TH STREET. The vicinity map is used to identify multiple streets.
2. The second line is Universal font (size 24, ~1/4" high) centered and is the abbreviated contents of the plan. This may include any or all of the following: WM., PSD, PSS, PS, C/W, DRAINAGE, CONC. CURB, LANDSCAPE, SIGNALIZATION, ALLEY PAVING, PAVING, ETC. These abbreviations are in the Standard Plans book.
3. The third line is Universal font (size 24, ~1/4" high) centered and is the used to identify the name of the street when multiple streets are involved or the subject shown on a specific sheet. Examples from previous plans: 30TH AVENUE NE, LAKE CITY WAY NE, COVER SHEET, PLAN AND PROFILE, DETAILS, CHANNELIZATION PLAN, TRAFFIC SIGNAL PLAN, SIGNALIZATION SCHEDULES & DETAILS, LIGHTING PLAN, LANDSCAPE PLAN..... This third line can be blank when the plan has only a couple of sheets.

Above the title box is Universal font (size 18, ~1/8" high) left justified as shown and this is where the address of the project is placed. Space permitting the name of the development may be placed here. On this same line use Universal font (size 18) over to the edge of the sheet. Type "DPD PROJECT #", followed by the project number assigned by DPD that required the street improvements shown on the plan. If these improvements are required as a condition of a short plat, use that DPD number. This is for cross reference purposes. If no DPD application or permit is associated with this work, leave this blank.

DESIGN REVIEW FOR STREET IMPROVEMENT PERMIT (SMC 15.04):

I, THE CONTACT PERSON LISTED BELOW, HEREBY APPLY FOR DESIGN GUIDANCE IN DEVELOPING STREET IMPROVEMENT PLANS TO USE OR OCCUPY PUBLIC PROPERTY AT:

PROJECT ADDRESS: _____ SDOT PROJECT#: _____

CROSS STREETS: _____ DPD PROJECT #: _____

LAND USE ZONE: _____ DPD ZONING PLANS EXAMINER: _____

PROPONENT'S PROJECT TITLE: _____

CONTACT PERSON: _____ PHONE: _____

FIRM: _____ FAX: _____

ADDRESS: _____

EMAIL: _____

PARTY TO BE BILLED (SELECT ONE) ☐ CONTACT PERSON ☐ OWNER

OWNER'S NAME: _____ PHONE: _____

FIRM: _____ FAX: _____

ADDRESS: _____

Requesting permission to use / occupy public place for the purpose of constructing:

TYPE OF CONSTRUCTION:

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> ALLEY PAVING | <input type="checkbox"/> STREET TREES | <input type="checkbox"/> STRUCTURES | <input type="checkbox"/> WATERMAIN |
| <input type="checkbox"/> STREET PAVING | <input type="checkbox"/> GRADING | <input type="checkbox"/> SANITARY SEWER | <input type="checkbox"/> STREET LIGHTING |
| <input type="checkbox"/> CONCRETE CURB | <input type="checkbox"/> PEDESTRIAN WALK | <input type="checkbox"/> STORM DRAIN | <input type="checkbox"/> TRAFFIC SIGNAL |
| <input type="checkbox"/> SIDEWALKS | <input type="checkbox"/> STAIRWAY | <input type="checkbox"/> DETENTION SYSTEM | |

OTHER (Please explain): _____

Documents provided with application: ☐ 30% Design ☐ 60% Design ☐ 90% Design ☐ 100% Design
Documents in the form of One (1) reproducible and two (2) copies of the preliminary design drawings and
a set of: ☐ calculations, ☐ cross sections, and / or ☐ other support documentation.

STATEMENT

I acknowledge and agree to the terms of the **Street Improvement Permitting Process For Construction in the Public Rights-of-Way**, incorporated by this reference, and agree to the following:

1. The applicant shall provide an initial deposit for review and additional deposits for the construction phase activities. The amounts of the required deposits are estimates only, and any balance after all charges have been made against the deposits will be remitted to the depositor. Should charges exceed the deposit, the permittee will be responsible for payment to the City.
2. If the applicant is not the owner, he / she will be responsible for informing the owner of the requirements of the permit.

Signature of Applicant: _____

Date: _____

Printed Name of Applicant: _____



Application for design review for Platting of Full Subdivisions (SMC 23.22)

I, THE CONTACT PERSON LISTED BELOW, HEREBY APPLY FOR DESIGN GUIDANCE IN DEVELOPING STREET IMPROVEMENT PLANS TO USE OR OCCUPY PUBLIC PROPERTY AT:

PROJECT ADDRESS: _____ SDOT PROJECT#: _____

CROSS STREETS: _____ DPD PROJECT #: _____

LAND USE ZONE: _____ DPD ASSIGNED PLANNER: _____

PROPONENT'S PROJECT TITLE: _____

CONTACT PERSON: _____ PHONE: _____

FIRM: _____ FAX: _____

ADDRESS: _____

EMAIL: _____

PARTY TO BE BILLED (SELECT ONE) ☐ CONTACT PERSON ☐ OWNER

OWNER'S NAME: _____ PHONE: _____

FIRM: _____ FAX: _____

ADDRESS: _____

Requesting permission to use / occupy public place for the purpose of constructing:

TYPE OF CONSTRUCTION:

- | | | | |
|---|---------------------------------------|---|--|
| <input type="checkbox"/> ALLEY PAVING | <input type="checkbox"/> STREET TREES | <input type="checkbox"/> STRUCTURES | <input type="checkbox"/> WATERMAIN |
| <input type="checkbox"/> STREET PAVING | <input type="checkbox"/> GRADING | <input type="checkbox"/> SANITARY SEWER | <input type="checkbox"/> STREET LIGHTING |
| <input type="checkbox"/> CONCRETE | <input type="checkbox"/> PEDESTRIAN | <input type="checkbox"/> STORM DRAIN | <input type="checkbox"/> TRAFFIC SIGNAL |
| <input type="checkbox"/> SIDEWALKS | <input type="checkbox"/> STAIRWAY | <input type="checkbox"/> DETENTION SYSTEM | |
| <input type="checkbox"/> Other (explain): <u>FULL SUBDIVISION</u> | | | |

Documents provided with application: ☐ 10%-30% Design ☐ 30%-60% Design ☐ 60%- 90% Design ☐ 100% Design
Documents in the form of One (1) reproducible and two (2) copies of the preliminary design drawings and a set of: ☐ calculations,
☐ cross sections, and / or ☐ other support documentation.

STATEMENT

I acknowledge and agree to the terms of the Street Improvement Permitting Process For Construction in the Public Rights-of-Way, incorporated by this reference, and agree to the following:

1. The applicant shall provide an initial deposit for review and additional deposits for the construction phase activities. The amounts of the required deposits are estimates only, and any balance after all charges have been made against the deposits will be remitted to the depositor. Should charges exceed the deposit; the permittee will be responsible for payment to the City.
2. If the applicant is not the owner, he / she will be responsible for informing the owner of the requirements of the permit.

Signature of Applicant: _____ Date: _____

Printed Name of Applicant: _____

Seattle Department of Transportation (SDOT), Street Use Division
700 5th Avenue, 37th Floor, P.O. Box 34996, Seattle, WA 98124-4996 (206) 684-5044, Fax (206) 684-5347

Application for street improvement permits (SMC 15.04)

I, THE CONTACT PERSON LISTED BELOW, HEREBY APPLY FOR A STREET IMPROVEMENT PERMIT TO USE OR OCCUPY PUBLIC PROPERTY AT:

PROJECT ADDRESS: _____ SDOT PROJECT#: _____
CROSS STREETS: _____ DPD PROJECT #: _____
LAND USE ZONE: _____ DPD ZONING PLANS EXAMINER: _____
PROPONENT'S PROJECT TITLE: _____

CONTACT PERSON: _____ PHONE: _____
FIRM: _____ FAX: _____
ADDRESS: _____
EMAIL: _____

PARTY TO BE BILLED (SELECT ONE) ☐ CONTACT PERSON ☐ OWNER

OWNER'S NAME: _____ PHONE: _____
FIRM: _____ FAX: _____
ADDRESS: _____

Requesting permission to use / occupy public place for the purpose of constructing:

TYPE OF CONSTRUCTION:

- | | | | |
|--|--|---|--|
| <input type="checkbox"/> ALLEY PAVING | <input type="checkbox"/> STREET TREES | <input type="checkbox"/> STRUCTURES | <input type="checkbox"/> WATERMAIN |
| <input type="checkbox"/> STREET PAVING | <input type="checkbox"/> GRADING | <input type="checkbox"/> SANITARY SEWER | <input type="checkbox"/> STREET LIGHTING |
| <input type="checkbox"/> CONCRETE CURB | <input type="checkbox"/> PEDESTRIAN WALK | <input type="checkbox"/> STORM DRAIN | <input type="checkbox"/> TRAFFIC SIGNAL |
| <input type="checkbox"/> SIDEWALKS | <input type="checkbox"/> STAIRWAY | <input type="checkbox"/> DETENTION SYSTEM | |

OTHER (Please explain): _____

Documents provided with application: 100% Design Documents in the form of one (1) reproducible and two (2) copies of the completed Design Drawings and a set of: ☐ calculations, ☐ cross sections, and / or ☐ other support documentation.

STATEMENT

I acknowledge and agree to the terms of the **Street Improvement Permitting Process For Construction in the Public Rights-of-Way**, incorporated by this reference, and agree to the following:

1. The surety bond must remain in force for one year after acceptance of the project by Seattle Transportation (SDOT).
2. The amount of the surety bond is SDOT's estimated construction cost of the project, plus fifteen percent (15%).
3. The applicant shall provide an initial deposit for review and additional deposits for the construction phase activities. The amounts of the required deposits are estimates only, and any balance after all charges have been made against the deposits will be remitted to the depositor. Should charges exceed the deposit; the permittee will be responsible for payment to the City.
4. If the applicant is not the owner, he / she will be responsible for informing the owner of the requirements of the permit.

Signature of Applicant: _____

Date: _____

Printed Name of Applicant: _____

NOTICE OF DESIGNED IMPROVEMENTS TO BE CONSTRUCTED IN THE PUBLIC RIGHTS OF WAY

I, THE PERMITTEE, CERTIFY TO SEATTLE DEPARTMENT OF
TRANSPORTATION THAT I HAVE FULLY EXPLAINED THE PROPOSED
CONSTRUCTION PROJECT AND INTENDED IMPACTS THEREOF TO THE
ADJACENT PROPERTY OWNER / OCCUPANT ADDRESSED BELOW.

AUTHORIZED SIGNATURE:

DATE:

PRINTED NAME:

TITLE/POSITION:

PHONE:

FIRM/AFFILIATION:

Street Improvement Permit

PLAN TITLED:

PROJECT ADDRESS:

TYPE OF IMPROVEMENTS:

STREET USE PERMIT NUMBER:

VAULT PLAN NUMBER:

*** ADJACENT PROPERTY OWNER / OCCUPANT ACKNOWLEDGMENT ***

PROPERTY ADDRESS NEAR ABOVE PROJECT:

I, REPRESENTING THE ABOVE ADDRESSED PROPERTY, HAVE BEEN FULLY
ADVISED ABOUT THE PROPOSED IMPROVEMENT PROJECT. I HAVE
REVIEWED THE CONSTRUCTION PLAN AND ITS IMPACT ON MY PROPERTY.
MY SIGNATURE DOES NOT IMPLY CONCURRENCE WITH THE PROPOSED
DESIGN.

I HAVE THESE COMMENTS:

AUTHORIZED SIGNATURE:

DATE:

PRINTED NAME:

PHONE:

ADDRESS:

CHECK ONE:

____ OWNER

____ LEASEE

____ TENANT

City Services for Street Improvement Permits

The Seattle Department of Transportation provides a variety of services to Applicants in the Street Improvement Permit process. Depending on the complexity and magnitude of the project, a number of design disciplines and stakeholders located in numerous departments can be involved. Involvement of the subject matter experts can include applicant assistance in determining permit/design requirements (Pre-Application / Application assistance) and review of design submittals (Review/Corrections processes) and specialty inspections during construction (including Acceptance of Completed Project).

PARTICIPANTS IN PERMIT PROCESS:

Various design and specialty subject matter experts could be involved in a Street Improvement Permit project. Participants depend on the impacts to the public infrastructure and can include:

Seattle Department of Transportation
(up to 10+)

Street Use, Neighborhood and Design Groups including Roadway, Signals, Lighting, Structures; Operational Groups, including Signals, Lighting, and Traffic

SPU
(up to 10+)

Drainage Design, Planning and Operations; Survey and Records, Water Design, Planning and Operations

Other City Departments
(up to 10)

Parks, Seattle City Light, Fire Department

External to City and Private Utilities
(up to 10)

Cable/phone utilities; King County/Metro; School District, etc.

CITY SERVICES PROVIDED:

Seattle Department of Transportation provides a variety of services, including an engineering review and coordination of the numerous public agencies and other stakeholders in the issuance of a Street Improvement Permit. The services provided include:

- 1. Pre-Application (discretionary/requested) Services**
(Working with Applicants to ensure that they and their designers understand City Engineering requirements.)
 - ✓ Pre-Application meeting(s), Engineering Review Meetings
- 2. Application Services**
(Ensure application/design is ready for review distribution.)
 - ✓ Site visits with inspector(s), intake meetings with application.

3. Review/Correction Services

(Coordination and consolidation of design submittals reviews.)

- ✓ Coordinate distribution of design submittals (internal to Seattle Department of Transportation, to SPU, to other City Departments and external agencies), conduct Seattle Department of Transportation review, consolidate review comments, resolve outstanding/conflicting comments, and ensure corrections are made.

4. Permit/Bonding Services

(Final Permit Approval, Appropriate Surety Bond is in place.)

- ✓ Prepare Project Inspection Book, coordinate pre-construction requirements, issue permit.

5. Pre-Construction Services

(Schedule, conduct and follow-up Pre-Construction meeting, (SPU) Survey Services.)

- ✓ Schedule and prepare for Pre-Construction, including coordination with required City subject matter experts, facilitate the meeting, identifying remaining action items prior to construction start.
- ✓ (SPU) Survey services, follow-up on action items.

6. Construction/Inspection Services

(Provide on-going, specialty/required inspections and final acceptance process.)

- ✓ On-going inspections, specialty inspections, final acceptance process (Construction inspection costs, dependent on duration, type of work and inspection required.)

7. Completion Services

(Provide as-built drawings, release of maintenance bond)

- ✓ As-Built process, review/release of surety bond

COST OF CITY SERVICES:

Obviously, you can incur a variety of costs, based on the type, duration and construction required by a Street Improvement Permit. A *general* range of cost of City services is as follows:

- **Small Projects** (with minimal public infrastructure impacts, no surveying required) can range from \$2,000 to \$15,000.
- **Medium projects** (with moderate public infrastructure impacts) can range from \$10,000 to \$30,000.
- **Large/Complex Projects** (with significant public infrastructure impacts) can range from \$20,000 and above.

The Seattle Department of Transportation Department's Street Improvement Analyst will provide a cost estimate of City services. The estimate will be based on information provided by the Applicant during the application phase and will be reviewed and updated as the project progresses through review, issuance, pre-construction and construction.

Street Improvement Survey Guidelines

VERTICAL DATUM AND BENCHMARKS

Datum

The following vertical datum are used by the City of Seattle:



Contact: For more information, call (206) 684-5044.



Document Reference: You can verify NAVD-88 benchmarks, as well as survey procedures at the Web sites listed on this page.

1. **City of Seattle Vertical Datum.** This datum was used for all survey and construction work in the City of Seattle from 1892 to 1992. It was gradually phased out from 1993 to 2002 as the NAVD-88 datum was being phased in (See #2 below). This datum is currently used for reference purposes only. Descriptions and elevations of City of Seattle benchmarks may be obtained by consulting City of Seattle Survey field books, available to the public on the forty-seventh floor of Seattle Municipal Tower at 700 Fifth Avenue¹.
2. **NAVD-88 Vertical Datum (1988 North American Vertical Datum).** Control reports of acceptable NAVD-88 city established benchmarks are available at www.surveycontrol.state.wa.us and at the Engineering Records Vault, on the 47th floor of the Seattle Municipal Tower, 700 5th Avenue. Other 3rd-Order NAVD-88 benchmarks that have been recorded as a public record would also be acceptable.

Mandatory Vertical Datum

All survey and construction work performed within City of Seattle right-of-way from March 2002 forward shall be on the NAVD-88 datum.

SURVEY PROCEDURE

Project site benchmarks shall be established by measurement from *two local benchmarks* that are listed at <http://www.surveycontrol.state.wa.us/>, meeting Third Order procedural requirements, as specified Geospatial Positioning Accuracy Standards by the Federal Geographic Data Committee at <http://www.fgdc.gov>. A record of this field work shall be provided to Seattle Public Utilities in the form of a survey field book or an electronic file in ASCII, Microsoft Word, or Excel.

When reference is made to records/plans created using the City of Seattle datum², a local conversion factor between the City of Seattle datum and the NAVD-88 datum shall be established by differential leveling between benchmarks in each of the respective datum. A record of this fieldwork shall be provided to Seattle Public Utilities in the form of a survey field book or an electronic file in ASCII, Microsoft Word, or Excel.

¹ Although 0.0 City of Seattle datum is *approximately* equal to 9.7 NAVD-88, this difference should not be used as a means of establishing one datum from the other. The difference could vary as much as a foot from one part of Seattle to another!

² These records could include plan drawings, survey field notes and other records.

Seattle Municipal Tower 700 5th Avenue, Suite 3900, PO Box 34996, Seattle WA 98124-4996
Tel: (206) 684-ROAD (684-7623) TTY/TDD: (206) 684-4009, Fax: (206) 684-5180
An equal opportunity employer. Accommodations for people with disabilities provided upon request.

BENCHMARK DESCRIPTIONS

All plan drawings, survey field notes, and electronic files shall state which datum is being used and describe the benchmarks that were used.

- NAVD-88 benchmarks should list their benchmark number, Point Name (Designation)³, elevation, and description.
- City of Seattle benchmarks should list City of Seattle field book number, page, elevation, and description.
- Local project benchmarks set by the consultant should list elevation and description.

SURVEY CONTENT OF CONSTRUCTION PLANS

The following is the minimum survey information required on any plans.

Horizontal Control

City of Seattle monuments shall be the basis of horizontal control. The plan shall show the monuments used, describing the type of monument (e.g., monument in case) and what it monuments (e.g., intersection with centerline of 4th Avenue). If a construction baseline is created, its positional relationship to the monuments must be clearly defined (i.e., dimensions or coordinates).

All improvements and rights-of-way shall be stationed and dimensioned from the monument lines or baselines as described above. Wherever possible, street stationing shall be the stationing established by the City of Seattle when the streets were originally surveyed. This stationing can generally be found in the City of Seattle survey field books, which are referenced on the City's Quarter Section maps, both of which are available to the public on the 47th floor of the Seattle Municipal Tower at 700 5th Avenue.

Monument Replacement

- Any monuments that will be disturbed by construction must be noted on the plan as requiring replacement. The City of Seattle (Seattle Public Utilities, Engineering Dept., Survey Section) must be notified in sufficient time to reference the monument before it is disturbed. The City of Seattle will set all street monuments, whether they are replacements or new. For further details, see the Standard Specifications for Road, Bridge and Municipal Construction, 2000 Edition, Vol. 2, Sections 8-13.
- All horizontal curves shall be dimensioned with sufficient curve data to define their geometry (e.g., radius, curve length, delta, and PI or PC/PT stationing).



Document

Reference: The City's Quarter Section maps are available in the Seattle Public Utilities Engineering Services Records Vault office on the 47th floor of Seattle Municipal Tower, 700 Fifth Avenue.



Document

Reference: Standard Specifications for Road, Bridge and Municipal Construction, 2000 Edition, Vol. 2, Sections 8-13.

³ When utilizing City of Seattle NAVD-88 benchmarks, reference the record by the "Point Name (Designation)" as listed on the data sheet (e.g., SNV-7508). For benchmarks from other sources, reference by the "Point ID (PID)" or equivalent.

Paving and Curbs

- Profiles shall be included for all street centerlines and curbs, including curb returns.
- Profiles shall show PVI station and elevation, length of vertical curve, and grade of tangents.

Storm Drain and Sewer

- Location for manholes shall be to the “control point” that defines the alignment of the pipe. If the center of the manhole is offset from this point, this should be dimensioned in a detail.
- Horizontal location of the control point for each manhole shall be shown in the plan view by station and out from the monument line (or baseline if that is used).
- Profiles shall show invert elevation and rim elevation for each manhole. Invert grades shall be shown for the control point. The profile distance along the pipe should match the distance between the control points.

CONSTRUCTION SURVEY DOCUMENTATION

The City of Seattle shall be provided with a record of construction points set. This record should include the following:

1. A sketch showing the relationship of the monuments, improvements and the offset points set. The sketch should show all relevant dimensions and stationing, following good survey note keeping practices.
2. A hard copy or electronic file in ASCII, Microsoft Word, or Excel showing the grades set for the improvement (i.e., “grade sheet”).

COMMON ERRORS TO AVOID

The following common errors are unacceptable on any plans submitted to the City of Seattle.

Paving Design

- The submitted plans have proposed new curbs, with a narrow strip of new paving between the new curb and a saw cut in the existing paving. The plan calls for a cross-slope of 2% and provides a profile, which appears acceptable. However, because of insufficient analysis of existing paving, unacceptable cross-slopes can result. The design must accommodate existing conditions.

Simple Math Errors

- Calculated distances between manholes (control points) are incorrect.
- Calculated grades between manholes (control points) are incorrect.

Inconsistencies

- Information in plan view is inconsistent with that in profile view.
- Information is inconsistent across match lines.

OBTAINING SURVEY SERVICES

Private surveyors may be hired to perform land survey services for preliminary engineering and engineering design. The survey process and product must meet the established guidelines found in the Street Improvement Survey Guidelines section of this document.

In addition, the engineer, developer, or contractor has the option of hiring private surveyors or City of Seattle surveyors to perform the construction staking and production of necessary grade sheets. Any survey work shall be done under the supervision of a licensed surveyor.

If the City of Seattle surveying unit is requested to perform the construction staking and grade, please coordinate the request through your Street Improvement Analyst to schedule the survey work.

Bond Transmittal Sample

date

company
attn: name
address

Re: Bond Transmittal for Construction at location
Street Use Permit xxxxxxx

To Whom It May Concern:

Enclosed are an Individual Permit Bond Form, instructions for bond signing and a Street Improvement Cost Estimate.

The issuance of the Street Use Permit is conditional upon the submittal of the following items:

1. **Approved plans**
2. A **surety bond or cash deposit** in the amount of \$ xxxxxxx.00. If a bond is to be posted, a bonding company will need to prepare a bond according to the enclosed bond form sample. The bond must be signed by the managing partner of the partnership, by the owner of a sole proprietorship, or by the president or vice president of a corporation. If the bond is signed by other than the president or vice president of the corporation, written proof of authority to bind the corporation must be provided, referring to the corporate bylaws and/or a resolution authorizing the delegation of such authority.
3. A **construction phase cash deposit** in the amount of \$ xxxxxxx.00, which includes a \$68.00 permit fee, is to be made to cover the City's cost of inspection and survey and administrative processing. Additional deposits may be necessary as the project progresses. This is an estimate for planning purposes and not a "bid item" for City services. In the event cost exceeds the deposit, additional deposits may be required.

Either the completed bond or cash deposit, together with a cash deposit for the construction phase, must be presented to the Street Use Counter, Seattle Municipal Tower, Suite 3700, 700 5th Avenue, Seattle WA 98124-4996 prior to issuance of the permit. A bond will be sent to the Law Department for approval. Upon approval of the bond, the permit may be issued. **A pre-construction meeting is required prior to commencing with work under this permit. Upon completion of the above noted items, contact SDOT Inspection (Ray Barnes) at 615-0769 to schedule a meeting.**

Please note that the surety bond or cash deposit must remain in force for a period of one year past the acceptance of the construction by the Seattle Department of Transportation. If you have any questions, please call me at 684-xxxx.

Sincerely,

Name
Street Use Section

Enclosures:
Bond form
Instructions for bond completion
Engineering cost estimate